



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/359,527	07/22/1999	PETER G. WEBB	10990641-1	2940

22878 7590 09/01/2006

AGILENT TECHNOLOGIES INC.
INTELLECTUAL PROPERTY ADMINISTRATION, LEGAL DEPT,
M/S DU404
P.O. BOX 7599
LOVELAND, CO 80537-0599

EXAMINER

FORMAN, BETTY J

ART UNIT PAPER NUMBER

1634

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/359,527

Applicant(s)

WEBB ET AL.

Examiner

BJ Forman

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 8-14, 17, 49-52 and 55-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 5-14 17 49-52 55-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Response to Arguments***

Applicant's arguments presented in the Appeal Brief, filed 20 June 2006, with respect to the rejections of the pending claim under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-5, 8-14, 17, 49-52 and 55-57 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 and 25-34 of U.S. Patent No. 6,943,036. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to methods of forming biopolymer arrays comprising the steps of depositing reagents onto a specific location on the array, examining a parameter of the deposition, based on an expected value and if an

Art Unit: 1634

error is detected, correcting the parameter prior to further deposition. The claim sets differ in that the '036 claims recited details of deposition e.g. providing a substrate, depositing a reagent, repeating and etc. However, the instant claim language "comprising" encompasses the additional steps recited in the patent. The claim sets further differ in that the instant claims define the pattern as being determined by a processor in communication with the deposition apparatus. However, the patent claims are drawn to patterned deposition (e.g. test pattern, Claim 19), which the specification defines as computer-controlled operation of the deposition apparatus (Column 13, lines 25-54). Therefore, the patented deposition is computer controlled as defined by the specification. For these reasons, the claim sets are not patentably distinct.

Claims 2-5, 8-14, 17, 49-52 and 55-57 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,998,230. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to methods of fabrication biopolymer arrays comprising deposition, evaluation of the deposition for errors and correction of detected error. The claim sets differ merely in that the '230 claims recite details of deposition e.g. dispensing. However, the instant claim language "comprising" encompasses the additional steps recited in the patent. The claim sets further differ in that the instant claims define the arrayed deposition as being determined by a processor in communication with the deposition apparatus. However, the patent claims are drawn to arrayed deposition (e.g. Claim 1, step a), which the specification defines as computer-controlled operation of the deposition apparatus (Column 12, lines 29-42). Therefore, the patented deposition is computer controlled as defined by the specification. For these reasons, the claim sets are not patentably distinct.

Art Unit: 1634

Claims 2-5, 8-14, 17, 49-52 and 55-57 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,939,673 in view of Baldeschwieler et al (U.S. Patent No. 6,015,880. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to method of making biopolymer arrays and differ only in the arrangement of limitations within the claim sets. For example, the independent claims of the instant claim sets define the process as computer controlled, while dependent claim 4, recites the similar requirement. Furthermore, computer-controlled operation and/or construction of a deposition apparatus would have been obvious to one of ordinary skill in the art at the time the claimed invention was made. For example, Baldeschwieler et al teach computer and software for controlling all operations of ink jet deposition during array construction (Column 9, lines 5-53). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the processor of Baldeschwieler et al to the calculating and model construction of the '880 patent. One of ordinary skill in the art would have been motivated to do so for the expected benefit of computer controlled deposition (Column 9, lines 5-53).

The courts have stated that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art (see: *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)) (see MPEP 2144.04 III).

Claims 2-5, 8-14, 17, 49-52 and 55-57 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 7,027,629 in view of Baldeschwieler et al (U.S. Patent No. 6,015,880). Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of

Art Unit: 1634

claims are drawn to methods of error detection during reagent deposition for biopolymer array fabrication. The claim sets differ in that the '629 claims include numerous steps of deposition evaluation e.g. identifying position error, determining positions of a subset and etc. However, the instant claim language "comprising" encompasses the additional element of the patent claims. The claim sets further differ in that the instant claims are drawn to operation determined by a processor in communication with a deposition apparatus while the '629 claims are drawn to "calculating ideal positions" and "constructing a general model". While the '629 patent claims do not define the calculating and/or constructing as being determined by a communicating processor, this element would have been obvious to one of ordinary skill in the art at the time the claimed invention was made. For example, Baldeschwieler et al teach computer and software for controlling all operations of ink jet deposition during array construction (Column 9, lines 5-53). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the processor of Baldeschwieler et al to the calculating and model construction of the '880 patent. One of ordinary skill in the art would have been motivated to do so for the expected benefit of computer controlled deposition (Column 9, lines 5-53).

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

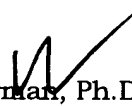
Art Unit: 1634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.


BJ Forman, Ph.D.
Primary Examiner
Art Unit: 1634
August 30, 2006

 8/30/06
ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER